

OFFICIAL RECEIVEDIn the claims:

Please cancel claim 103 without prejudice and add new claims 115A96 as RECEIVED follows.

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GROUP 1600

113. An isolated or recombinant polypeptide comprising an amino acid sequence having at least 60 percent sequence identity with SEQ ID NO: 764, wherein said sequence identity is determined by the BLASTP algorithm, or by

(1) aligning the amino acid sequence with SEQ ID NO:764 to identify the number of matching positions shared by the amino acid sequence and SEQ ID NO:764,

(2) dividing the number of matching positions by the total number of amino acids in SEQ ID NO:764, and

(3) multiplying the dividend by 100.

114. The isolated or recombinant polypeptide of claim 113 comprising an amino acid sequence having at least 70 percent sequence identity with SEQ ID NO: 764.

115. The isolated or recombinant polypeptide of claim 113 comprising an amino acid sequence having at least 80 percent sequence identity with SEQ ID NO: 764.

116. The isolated or recombinant polypeptide of claim 113 comprising an amino acid sequence having at least 90 percent sequence identity with SEQ ID NO: 764.

117. The isolated or recombinant polypeptide of claim 113 comprising an amino acid sequence having at least 95 percent sequence identity with SEQ ID NO: 764.

118. The isolated or recombinant polypeptide of claim 113 comprising an amino acid sequence having at least 98 percent sequence identity with SEQ ID NO: 764.

119. The isolated or recombinant polypeptide of claim 113 comprising an amino acid sequence having at least 99 percent sequence identity with SEQ ID NO: 764.

120. An isolated or recombinant polypeptide comprising an amino acid sequence encoded by a nucleotide sequence which hybridizes under stringent conditions to the complement of a nucleotide sequence encoding SEQ ID NO: 764.

121. An isolated or recombinant polypeptide of any one of claims 113-120, which is an *H. pylori* polypeptide.

122. An isolated or recombinant polypeptide of any one of claims 113-120 which is an isolated polypeptide.

123. An isolated or recombinant polypeptide of any one of claims 113-120 which is a recombinant polypeptide.

124. An isolated polypeptide comprising the amino acid sequence of SEQ ID NO: 764.

125. An isolated immunogenic polypeptide comprising at least 5 consecutive amino acid residues of SEQ ID NO: 764.

126. The isolated immunogenic polypeptide of claim 125 comprising at least about 10 consecutive amino acid residues of SEQ ID NO: 764.

127. The isolated immunogenic polypeptide of claim 125 comprising at least about 12 consecutive amino acid residues of SEQ ID NO: 764.

128. The isolated immunogenic polypeptide of claim 125 comprising at least about 16 consecutive amino acid residues of SEQ ID NO: 764.

129. The isolated immunogenic polypeptide of claim 125 comprising at least about 20 consecutive amino acid residues of SEQ ID NO: 764.

130. The isolated immunogenic polypeptide of claim 125 comprising at least about 50 consecutive amino acid residues of SEQ ID NO: 764.

131. The isolated immunogenic polypeptide of claim 125 comprising at least about 100 consecutive amino acid residues of SEQ ID NO: 764.

132. A fusion protein comprising an isolated or recombinant polypeptide of any one of claims 113-120, operably linked to an additional amino acid sequence.

133. The fusion protein of claim 132, wherein the additional amino acid sequence comprises an *H. pylori* polypeptide.

134. A fusion protein comprising an isolated or recombinant polypeptide claim 121, operably linked to an additional amino acid sequence.

135. The fusion protein of claim 134, wherein the additional amino acid sequence comprises an *H. pylori* polypeptide.

136. A fusion protein comprising an isolated polypeptide of claim 122, operably linked to an additional amino acid sequence.

137. The fusion protein of claim 136, wherein the additional amino acid sequence comprises an *H. pylori* polypeptide.

138. A fusion protein comprising a recombinant polypeptide of claim 123, operably linked to an additional amino acid sequence.

139. The fusion protein of claim 138, wherein the additional amino acid sequence comprises an *H. pylori* polypeptide.

140. A fusion protein comprising an immunogenic polypeptide of any one of claims 125-131, operably linked to an additional amino acid sequence.

141. The fusion protein of claim 140, wherein the additional amino acid sequence comprises an *H. pylori* polypeptide.

142. A composition comprising isolated immunogenic polypeptides, wherein at least one of the isolated immunogenic polypeptides comprises at least about 10 consecutive amino acid residues of SEQ ID NO:764.

143. The composition of claim 142, wherein the at least one isolated immunogenic polypeptide comprises at least about 12 consecutive amino acid residues of SEQ ID NO: 764.

144. The composition of claim 142, wherein the at least one isolated immunogenic polypeptide comprises at least about 16 consecutive amino acid residues of SEQ ID NO: 764.

145. The composition of claim 142, wherein the at least one isolated immunogenic polypeptide comprises at least about 20 consecutive amino acid residues of SEQ ID NO: 764.

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146. The composition of claim 142, wherein the at least one isolated immunogenic polypeptide comprises at least about 50 consecutive amino acid residues of SEQ ID NO: 764.

147. The composition of claim 142, wherein the at least one isolated immunogenic polypeptide comprises at least about 100 consecutive amino acid residues of SEQ ID NO: 764.

148. A composition of any one of claims 142-147, further comprising a pharmaceutically acceptable carrier.

149. A composition comprising an isolated or recombinant polypeptide of any one of claims 113-120 and a pharmaceutically acceptable carrier.

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150. A composition comprising an isolated or recombinant polypeptide of claim 121 and a pharmaceutically acceptable carrier.

151. A composition comprising an isolated immunogenic polypeptide of any one of claims 125-131 and a pharmaceutically acceptable carrier.

152. An immunogenic composition comprising an effective amount of an isolated or recombinant polypeptide of any one of claims 113-120.

153. An immunogenic composition comprising an effective amount of an isolated or recombinant polypeptide of claim 121.

154. An immunogenic composition comprising an effective amount of an isolated immunogenic polypeptide of any one of claims 125-131.

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155. A vaccine composition comprising an effective amount of an isolated or recombinant polypeptide of any one of claims 113-120.

156. A vaccine composition comprising an effective amount of an isolated or recombinant polypeptide of claim 121.

157. A vaccine composition comprising an effective amount of an isolated immunogenic polypeptide of any one of claims 125-131.

158. A method of treating a subject for *H. pylori* infection comprising administering to the subject a composition of claim 142.

159. A method of treating a subject for *H. pylori* infection comprising administering to the subject a composition of claim 149

160. A method of treating a subject for *H. pylori* infection comprising administering to the subject a composition of claim 150.

161. A method of treating a subject for *H. pylori* infection comprising administering to the subject a composition of claim 151.

162. A method of treating a subject for *H. pylori* infection comprising administering to the subject a composition of claim 152.

163. A method of treating a subject for *H. pylori* infection comprising administering to the subject a composition of claim 153.

164. A method of treating a subject for *H. pylori* infection comprising administering to the subject a composition of claim 154.

165. A method of treating a subject for *H. pylori* infection comprising administering to the subject a composition of claim 155.

166. A method of treating a subject for *H. pylori* infection comprising administering to the subject a composition of claim 156.

167. A method of treating a subject for *H. pylori* infection comprising administering to the subject a composition of claim 157.

168. The method of claim 158, wherein the treatment is a prophylactic treatment.

169. The method of claim 159, wherein the treatment is a prophylactic treatment.

170. The method of claim 160, wherein the treatment is a prophylactic treatment.
171. The method of claim 161, wherein the treatment is a prophylactic treatment.
172. The method of claim 162, wherein the treatment is a prophylactic treatment.
173. The method of claim 163, wherein the treatment is a prophylactic treatment.
174. The method of claim 164, wherein the treatment is a prophylactic treatment.
175. The method of claim 165, wherein the treatment is a prophylactic treatment.
176. The method of claim 166, wherein the treatment is a prophylactic treatment.
177. The method of claim 167, wherein the treatment is a prophylactic treatment.
178. The method of claim 158, wherein the treatment is a therapeutic treatment.
179. The method of claim 159, wherein the treatment is a therapeutic treatment.
180. The method of claim 160, wherein the treatment is a therapeutic treatment.
181. The method of claim 161, wherein the treatment is a therapeutic treatment.

182. The method of claim 162, wherein the treatment is a therapeutic treatment.
183. The method of claim 163, wherein the treatment is a therapeutic treatment.
184. The method of claim 164, wherein the treatment is a therapeutic treatment.
185. The method of claim 165, wherein the treatment is a therapeutic treatment.
186. The method of claim 166, wherein the treatment is a therapeutic treatment
187. The method of claim 167, wherein the treatment is a therapeutic treatment.
188. A method of producing a vaccine composition comprising substantially purifying a polypeptide of any one of claims 113-120, and formulating a vaccine composition comprising the polypeptide.
189. A method of producing a vaccine composition comprising substantially purifying a polypeptide of claim 121, and formulating a vaccine composition comprising the polypeptide.
190. A method of producing a vaccine composition comprising substantially purifying a polypeptide of any one of claims 125-131, and formulating a vaccine composition comprising the polypeptide.
191. A method of producing an immunogenic composition comprising isolating a polypeptide comprising at least 5 consecutive amino acid residues of SEQ ID NO: 764 and formulating a vaccine composition comprising the polypeptide.
192. The method of claim 191, wherein the isolated polypeptide comprises at least about 10 consecutive amino acid residues of SEQ ID NO: 764.